

Title (en)
DEVICE FOR ABSORBING ELECTROMAGNETIC WAVES

Title (de)
VORRICHTUNG ZUR ABSORPTION EINER ELEKTROMAGNETISCHEN WELLE

Title (fr)
DISPOSITIF D'ABSORPTION D'ONDE ÉLECTROMAGNÉTIQUE

Publication
EP 4142449 A1 20230301 (FR)

Application
EP 22188653 A 20220804

Priority
FR 2108795 A 20210823

Abstract (fr)
L'invention concerne un dispositif (10) d'absorption d'ondes électromagnétiques comprenant un réseau bidimensionnel de résonateurs (Res) en un premier matériau diélectrique ou magnéto diélectrique (Mat1), lesdits résonateurs présentant une forme de calotte sphérique lesdites ondes électromagnétiques à absorber étant comprises entre 0.1 et 50 GHz.

IPC 8 full level
H05K 9/00 (2006.01)

CPC (source: EP)
H05K 9/0088 (2013.01)

Citation (applicant)

- D. ZHOU ET AL.: "Analysis and Design of Multilayered Broadband Radar Absorbing Metamaterial Using the 3-D Printing Technology-Based Method", IEEE ANTENNAS AND WIRELESS PROPAGATION LETTERS, vol. 16, 2017, pages 133 - 136, XP055934891, DOI: 10.1109/LAWP.2016.2560904
- J. REN ET AL.: "3D-Printed Low-Cost Dielectric-Resonator-Based Ultra-Broadband Microwave Absorber Using Carbon-Loaded Acrylonitrile Butadiene Styrene Polymer", MATERIALS, vol. 11, 2018, pages 1249, XP055831380, DOI: 10.3390/ma11071249
- K.L. ZHANG: "Multifunctional broadband microwave absorption of flexible graphene composites", CARBON, vol. 141, 2019, pages 608 - 617, XP085537127, DOI: 10.1016/j.carbon.2018.10.024

Citation (search report)

- [X] CN 111403536 A 20200710 - UNIV JIANGXI NORMAL
- [A] CN 112397906 A 20210223 - UNIV HUBEI TECHNOLOGY
- [AD] REN JIAN ET AL: "3D-Printed Low-Cost Dielectric-Resonator-Based Ultra-Broadband Microwave Absorber Using Carbon-Loaded Acrylonitrile Butadiene Styrene Polymer", MATERIALS, vol. 11, no. 7, 1 July 2018 (2018-07-01), CH, pages 1249, XP055831380, ISSN: 1996-1944, DOI: 10.3390/ma11071249
- [A] VAN HOANG THI QUYNH ET AL: "Ultra-broadband Multilayer Microwave Absorber by Multimaterial 3D Printing", 2020 14TH EUROPEAN CONFERENCE ON ANTENNAS AND PROPAGATION (EUCAP), EURAAP, 15 March 2020 (2020-03-15), pages 1 - 4, XP033788859, DOI: 10.23919/EUCAP48036.2020.9135371

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4142449 A1 20230301; FR 3126279 A1 20230224

DOCDB simple family (application)
EP 22188653 A 20220804; FR 2108795 A 20210823